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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/316,897	05/20/1999	ANAND RAMAKRISHNA	1890	8450

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EXAMINER

NGUYEN, MAIKHANH

ART UNIT PAPER NUMBER

2176

DATE MAILED: 07/30/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/316,897

Applicant(s)

RAMAKRISHNA, ANAND

Examiner

Maikhanh Nguyen

Art Unit

2176

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 May 1999.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-47 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-47 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 May 1999 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. This action is responsive to communications: original application filed 06/22/1999.
2. Claims 1-47 are currently pending in this application. Claims 1, 17 and 30 are independent claims.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claims 1-8, 10-15, 17, 19-25, 27-39, and 43-47 are rejected under 35 U.S.C. 102(b) as being anticipated by **Shigemi et al.** (U.S. 6,279,006 – filed 10/1998).

As to independent claim 1, Shigemi teaches computer-readable medium having computer executable instructions (a computer-readable recording medium storing a structured data management program; col.3, lines 1-8), comprising,

- receiving a document having an element thereon, the document including information associating the element (the DynamicHTML 520 contains a plurality of expression forms such as HTML documents... each script of an operation description 13m associated with a contents description 12c is clearly associated with elements of the contents description 12c; col.6, line 38 - col.7, line 26) with an external component that is external to the document (the service common to the data having the same structure is located as the operation description 13 outside of the monitoring means 20, the service can easily be changed...the operation description 13 is coupled to each element in the contents model 11 and is not related to other operation descriptions, it can partly be changed without taking all the operation descriptions into account; col.7, lines 15-55); and

- rendering a page image corresponding to at least part of the document (these screen images are displayed on a user's display unit when the DynamicHTML 520 shown in FIG. 4 is executed... the DynamicHTML 520 contains a plurality of expression forms such as HTML documents; col.6, lines 14-42), the page image including a representation of the element; and

- accessing the external component for determining a behavior of the representation of the element rendered on the page image (the operation description 13 describes behaviors of the data in the contents description 12...functions to define semantics of each the of elements of the internal structure defined by the contents model 11, and to perform services accompanying the elements...carries out services accompanying the elements of the contents description 12; col.4, lines 17-57).

As to dependent claim 2, Shigemi teaches receiving an event, and accessing the external component in response to the event (sends information indicative of what event is performed on which element; col.11, lines 17-20).

As to dependent claim 3, Shigemi teaches modifying an appearance of the representation of the element (perform services accompanying the elements; col.4, lines 17-57).

As to dependent claim 4, Shigemi teaches changing a location of the representation of the element in response to accessing the external component (the service can easily be changed... it can partly be changed; col.7, lines 28-44).

As to dependent claim 5, Shigemi teaches drawing information on the page image in response to accessing the external component (When necessary information is entered... The semantics of the entered information are verified... then a screen image 533 for prompting proper entry is displayed; col.6, lines 18-38).

As to dependent claim 6, Shigemi teaches the external component comprises an object, and wherein accessing the external component includes instantiating an instance of the object (The management object holding means 10 holds a plurality of management objects 10a, 10b; col.4, lines 17-37).

As to dependent claim 7, Shigemi teaches receiving a new document having another element thereon, the new document including information associating the element with the external component, rendering a new page image corresponding to at least part of the document, the new page image including a representation of the other element, and accessing the external component for determining a behavior of the representation of the other element rendered on the page image (the DynamicHTML 520 contains a plurality of expression forms such as HTML

documents... associated with a contents description 12c is clearly associated with elements of the contents description 12c; col.6, line 38 - col.7, line 26).

As to dependent claim 8, Shigemi teaches the external component comprises a COM object, and wherein accessing the external component for determining a behavior of the representation of the other element includes accessing another instance of the object (the service common to the data having the same structure is located as the operation description 13 outside of the monitoring means 20... it can partly be changed without taking all the operation descriptions into account; col.7, lines 27-44).

As to dependent claim 10, Shigemi teaches the information associating the element with the external component is maintained in a custom tag (figs. 12 and 13).

As to dependent claim 11, Shigemi teaches the information associating the element with the external component is maintained in a class (figs. 4A and 4B).

As to dependent claim 12, Shigemi teaches the information associating the element with the external component is maintained in the document inline with the element (By separating the contents description 12 and the operation description 13 from each other, a plurality of languages are not mixed and present in the same file; col.7, lines 56-67).

As to dependent claim 13, Shigemi teaches the document includes another element having a representation thereof rendered in the page image, the document includes other information associating the other element with the external component, and further comprising, accessing the external component for determining a behavior of the representation of the other element (The monitoring means 20 serves to call an operation description executing means 21 and a structure managing means 22 in response to a request from the user or another system to a

management object...determines, reads, interprets, and executes the operation description 13 which is coupled to the contents model 11; col.4, lines 38-48).

As to dependent claim 14, Shigemi teaches the document includes information associating the element with a second external component, and further comprising, accessing the second external component for determining a behavior of the representation of element (For reading the contents description 12, data behaviors can be described in the operation description 13 such that a structure may be designated and data of each element may be read; col.8, lines 17-31).

As to dependent claim 15, Shigemi suggests resolving a conflict between the behavior determined by the external component and the behavior determined by the second external component (a new structure compatible with the new system or design the new system so as to be able to handle both structures of new and old data...data conflict is often experienced between an HTML and a web browser...there is a web browser which defines unique tags of its own; col.1, lines 26-39).

As to independent claim 17, Shigemi teaches a method of providing dynamic effects to an HTML document (a DynamicHTML 520; col.6, lines 14-45), comprising the steps of:

- encapsulating code in an external component for affecting the behavior of elements (since the service common to the data having the same structure is located as the operation description 13 outside of the monitoring means 20, the service can easily be changed...the definition of semantics of data of the contents description 12 with respect to each element of the structure in the contents model 11 and the entry assistance service are described as the

operation description 13 by the script language, rather than being coded in the hardware of the monitoring means 20; col.7, lines 28-65),

- inserting an element into a document (in a DynamicHTML 520 to relate an operation description to a certain element in a structured document; col.6, lines 14-17),

- attaching a reference to the document to associate the element with the external component (each script of an operation description 13m associated with a contents description 12c is clearly associated with elements of the contents description 12c....issuing an instruction to the structure managing means using a locator description such as an Xpointer; col.7, lines , and

- providing the document to a renderer (these screen images are displayed on a user's display unit when the DynamicHTML 520 shown in FIG. 4 is executed... the DynamicHTML 520 contains a plurality of expression forms such as HTML documents; col.6, lines 14-42).

As to dependent claim 19, Shigemi teaches rendering a page image from the document, accessing the external component, and modifying a representation of the element based on the code in the external component (these screen images are displayed on a user's display unit when the DynamicHTML 520 shown in FIG. 4 is executed... the DynamicHTML 520 contains a plurality of expression forms such as HTML documents; col.6, lines 14-42)

Dependent claim 20 includes the same limitations as in claim 8, and is similarly rejected under the same rationale.

Dependent claims 21-22 include the same limitations as in claims 3-4, and are similarly rejected under the same rationale.

As to dependent claim 23, Shigemi teaches rendering a page image from the document, accessing the external component, and drawing information in the image based on the code in the external component (these screen images are displayed on a user's display unit when the DynamicHTML 520 shown in FIG. 4 is executed... the DynamicHTML 520 contains a plurality of expression forms such as HTML documents; col.6, lines 14-42).

Dependent claim 24 includes the same limitations as in claim 5, and is similarly rejected under the same rationale.

Dependent claim 25 includes the same limitations as in claim 2, and is similarly rejected under the same rationale.

Dependent claims 27-29 include the same limitations as in claims 10-12, and are similarly rejected under the same rationale.

As to independent claim 30, Shigemi teaches in a computer system, a system for rendering page images on a display (These screen images are displayed on a user's display unit; col.6, lines 14-38), comprising:

- an external component encapsulating code for modifying the behavior of elements (since the service common to the data having the same structure is located as the operation description 13 outside of the monitoring means 20, the service can easily be changed...the operation description 13 is coupled to each element in the contents model 11 and is not related to other operation descriptions, it can partly be changed without taking all the operation descriptions into account; col.7, lines 15-55); and

- a renderer connected to the display for rendering page images (these screen images are displayed on a user's display unit when the DynamicHTML 520 shown in FIG. 4 is executed;

col.6, lines 14-38), the renderer receiving a document having an element specified therein and information associating the element with the external component (the DynamicHTML 520 contains a plurality of expression forms such as HTML documents and scripts... each script of an operation description 13m associated with a contents description 12c is clearly associated with elements of the contents description 12c; col.6, line 38 - col.7, line 26), the renderer rendering a page image corresponding to the document and accessing the external component for modifying the page image (the description of data itself and its structure and descriptions about behaviors of the data are held as management objects in the management object holding means 10 ...The contents of behaviors in the present system are thus clearly divided... a portion which is changed... and a process which is not changed; col.8, lines 48-65).

Dependent claim 31 includes the same limitations as in claim 2, and is similarly rejected under the same rationale.

As to dependent claim 32, Shigemi teaches the renderer displays a representation of the element and modifies a behavior of the element by accessing the external component (the description of data itself and its structure and descriptions about behaviors of the data are held as management objects in the management object holding means 10 ...The contents of behaviors in the present system are thus clearly divided... a portion which is changed... and a process which is not changed; col.8, lines 48-65).

Dependent claims 33-35 include the same limitations as in claims 3-5, and are similarly rejected under the same rationale.

As to dependent claim 36, Shigemi teaches the renderer calls the external component a plurality of time to draw information on the page image, and the renderer draws information on

the page image between at least some of calls to the external component (These screen images are displayed on a user's display unit when the DynamicHTML 520 shown in FIG. 4 is executed... it is decided whether the present time is within a service time; col.6, lines 18-37).

Dependent claim 37 includes the same limitations as in claim 8, and is similarly rejected under the same rationale.

Dependent claim 38 includes the same limitations as in claim 6, and is similarly rejected under the same rationale.

Dependent claim 39 includes the same limitations as in claim 7, and is similarly rejected under the same rationale.

Dependent claim 43 includes the same limitations as in claim 10, and is similarly rejected under the same rationale.

Dependent claims 44-46 include the same limitations as in claims 12-14, and are similarly rejected under the same rationale.

As to dependent claim 47, Shigemi teaches the renderer accesses the external component to control the format of data input by a user (when the user's request changes due to a change in the environment, resulting in a change in the definition of the structure of the contents model 11 and the behavior of the operation description 13; col.8, lines 6-16).

Claim Rejections - 35 USC § 103

4 The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Art Unit: 2176

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 9, 16, 18, 26, and 40-42 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Shigemi et al.** in view of **Straub et al.** (U.S. 5,905,492 – filed 12/1996).

As to dependent claim 9, Shigemi does not explicitly teach “the information associating the element with the external component is maintained in a cascading style sheet.”

Straub teaches the information associating the element with the external component is maintained in a cascading style sheet (A provider of the themed enhancements may continually change the updating resources residing on the server...The themed enhancements can include templates and style sheets used in generating the hypertext pages; col.3, line 39-col.4, line 14).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Straub with Shigemi because it would have provided the capability for controlling formatting of HTML documents in a display.

As to dependent claim 16, Shigemi does not explicitly teach “downloading the external component.”

Straub teaches downloading the external component (an update service performs recurring updates to the themed enhancements by downloading updating resources from a server computer on a network, such as the Internet; col.3, lines 39-64).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Straub with Shigemi because it would have provided the capability for obtaining updating resources more rapidly.

As to dependent claim 18, Shigemi does not explicitly teach “providing the external component to the renderer.”

Straub teaches providing the external component to the renderer (an update service performs recurring updates to the themed enhancements by downloading updating resources from a server computer on a network, such as the Internet; col.3, lines 39-64).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Straub with Shigemi because it would have provided the capability for obtaining updating resources more rapidly.

Dependent claims 26 and 40 includes the same limitations as in claim 9, and is similarly rejected under the same rationale.

As to dependent claim 41, Shigemi does not explicitly teach “the cascading style sheet is embedded in the document.”

Straub teaches the cascading style sheet is embedded in the document (The themed enhancements can include templates and style sheets used in generating the hypertext pages of the graphical user interface; col.4, lines 1-14).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Straub with Shigemi because it would have provided the capability for controlling formatting of HTML documents in a display.

Dependent claim 42 includes the same limitations as in claim 41, and is similarly rejected under the same rationale.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Hui et al.	U.S Patent No. 6,237,010	issued dated: May 22, 2001
Jones et al.	U.S Patent No. 6,415,307	issued dated: Jul. 2, 2002
Sung et al.	U.S Patent No. 5,594,660	issued dated: Jan. 14, 1997
Helfman	U.S Patent No. 6,119,135	issued dated: Sep.12, 2000

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Maikhanh Nguyen whose telephone number is (703) 306-0092. The examiner can normally be reached on Monday - Friday from 9:00am – 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Heather R Herndon can be reached on (703) 308-5186. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-5403 for regular communications and (703) 308-5403 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-9600.

Contact Information:

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks
Washington, D.C. 20231

Or fax to:

Art Unit: 2176

AFTER-FINAL faxes must be signed and sent to (703) 746-7238.

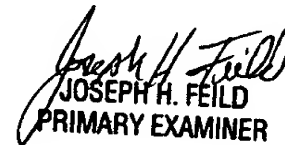
OFFICIAL faxes must be signed and sent to (703) 746-7239.

NON OFFICIAL faxes should be sent to (703) 746-7240.

All OFFICIAL faxes will be handled and entered by the docketing personnel. The date of entry will correspond to the actual FAX reception date unless that date is a Saturday, Sunday, or a Federal Holiday within the District of Columbia, in which case the official date of receipt will be the next business day. The application file will be promptly forwarded to the Examiner unless the application file must be sent to another area of the Office, e.g., Finance Division for fee charging, etc.

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA., Sixth Floor (Receptionist). All hand-delivered responses will be handled and entered by the docketing personnel. Please do not hand deliver responses directly to the Examiner.

Maikhanh Nguyen
July 23, 2002


JOSEPH H. FEILD
PRIMARY EXAMINER